

Pluto

Medium: Dry compressed air

Mass flow ranges (low and high):

0.0002 – 0.020 lbm/sec (0.16 – 16 SCFM)
 0.020 – 0.395 lbm/sec (16 – 316 SCFM)

Max MUT pressure: 135 psig

Repeatability (k=2): 0.10%

Uncertainty in mass flow rates (k=2):

0.28% (low)
 0.25% (high)

Primary UUTs: mass meters, laminar flow elements, critical flow venturis, subsonic venturis, turbines, rotameters

The automated testing system Pluto was designed to utilize nine binary-sized critical flow venturis (CFVs) as reference standards. Pluto employs fully automated flow and pressure control and has two parallel unit under test (UUT) sections.

- Preselected and optimized reference CFV combinations based on test plan prebuilt to customer specifications
- Feedforward flow rate control
- Live selection of pressure transducers to minimize turndown and uncertainty

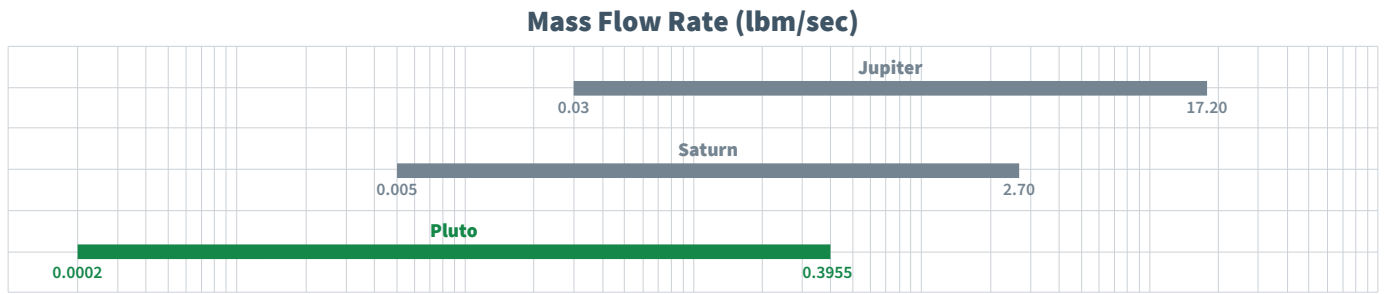
Reliable calibrations from an independent, accredited facility

- Calibration of the critical flow venturis versus NIST calibrated flow references
- Calibration of the pressure and temperature instrumentation versus NIST traceable CEESI standards
- Flow rate validation using existing CEESI critical flow references
- Control and pressure stability testing

- Temperature stability testing
- Reproducibility
- Sample UUT type testing

The benefits of automated testing

- **Exceptional accuracy**
- **Superior repeatability**
- **Fast turnaround**



Comparison of mass flow rates (lbm/sec) for CEESI's automated test stands



Diagram of the Pluto test stand

Assure your flow measurements with automated calibration.

For more information on our calibration and testing capabilities, visit CEESI.com or call (970) 897-2711.

About CEESI

As part of the WEST family of measurement assurance companies, CEESI helps move our clients and the industry forward by establishing standards, educating and sharing knowledge, and developing world-class facilities and remote metrological services.